

CLAIM AMENDMENTS

1. (canceled)

2. (currently amended) The rotating heat exchanger according to claim 1, ~~wherein~~ 24, further comprising peripheral seals ~~(15, 16)~~ are arranged between the periphery of the rotor ~~[[3]]~~ on the one hand and the housing ~~[[2]]~~ on the other hand.

3. (currently amended) The rotating heat exchanger according to claim 2, wherein peripheral seals ~~[[15, 16]]~~ are fixed to the housing ~~[[2]]~~.

4. (currently amended) The rotating heat exchanger according to claim ~~[[1,]]~~ 24 wherein the means for pressurizing maintains pressure of the housing or sealing air ~~can be kept~~ at a constant pressure level.

5. (currently amended) The rotating heat exchanger according to claim ~~[[1,]]~~ 24 wherein the means for pressurizing maintains pressure of the housing or sealing air ~~can be kept~~ at a constant differential pressure above the pressure of the airflows ~~[[5, 6; 8, 9]]~~ flowing through the rotor ~~[[3]]~~.

6. (canceled)

7. (currently amended) The rotating heat exchanger according to claim 1, ~~with 24, further comprising~~
a control and regulating device ~~, by means of which the operation of~~ for operating the pressure source ~~can be controlled or regulated~~ according to ~~[[the]]~~ an output signal of a pressure sensor measuring the pressure in the housing (2) ~~and/or a pressure sensor measuring the pressure of the airflows~~ ~~[[(5, 6; 8, 9)]]~~ flowing through the rotor ~~[[(3)]]~~.

8. (currently amended) The rotating heat exchanger according to claim ~~[[1,]]~~ 24 wherein the means for pressurizing pressurizes the housing (2) ~~whereof can be pressurized~~ with non-critical housing or sealing air.

9. (canceled)

10. (currently amended) The rotating heat exchanger according to claim 1, ~~wherein 24, further comprising~~
a rinsing purging wedge-like device (22), ~~which is~~ connected to the housing ~~[[(2)]]~~ and able to be supplied with a rinsing purging airflow (23) ~~by~~ from the means for pressurizing of ~~the housing or sealing air present in the housing (2), is provided~~ at the end face ~~[[(17)]]~~ of the rotor ~~[[(3)]]~~ in the region of the

first flow sector and ~~(7) for the exhaust air (8) and venting air (9) that is arranged in the rotary direction (11) of the rotor (3) directly before~~ immediately upstream in a rotation direction of the rotor of the second flow sector (4) for external air (5) and supply air (6).

11. (currently amended) The rotating heat exchanger according to claim 1, with 24, further comprising

a temperature-regulating device [[,]] by means of which the housing or sealing air can ~~, e.g. for the purpose of anti-~~ icing, be temperature-regulated.

12. (currently amended) The rotating heat exchanger according to claim [[1,]] 24 wherein the pressurizing means draws housing or sealing air ~~can be taken from the supply air and/or the external air system of the rotating heat exchanger (1) the airflow of the first sector.~~

13 - 14. (canceled)

15. [[(original)]] The method according to claim [[14,]] 25 wherein the pressure level of the housing or sealing air in the housing [[(2)]] is kept constant.

16. ~~[[original]]~~ The method according to claim ~~[[14,]] 25~~ wherein the pressure level of the housing or sealing air in the housing ~~[[2]]~~ is kept above the pressure level of the airflows ~~[[5, 6; 8, 9]]~~ flowing through the rotor ~~[[3]]~~ by a constant differential pressure.

17. (currently amended) The method according to claim ~~[[14,]] 25~~ wherein the pressure level of the housing or sealing air in the housing ~~[[2]]~~ is controlled or regulated in dependence on the pressure level in the housing ~~(2) and/~~ or the pressure level of the airflows ~~[[5, 6; 8, 9]]~~ flowing through the rotor ~~[[3]]~~.

18. (currently amended) The method according to claim ~~[[14,]] 25~~ wherein the housing ~~[[2]]~~ is pressurized with noncritical housing or sealing air.

19. (canceled)

20. (currently amended) The method according to claim ~~[[14,]] 25~~ wherein a rinsing purging wedge-like device ~~[[22]]~~ of the rotor ~~[[3]]~~ is supplied from the housing ~~[[2]]~~ with housing or sealing air as rinsing purging air.

21. (currently amended) The method according to claim [[14,]] 25 wherein the housing or sealing air is temperature-regulated.

22. (currently amended) The method according to claim [[14,]] 25 wherein the housing or sealing air is taken from the supply air and/or external air system of the rotating heat exchanger [[(1)]].

23. (canceled)

1 24. (new) A rotating regenerative heat exchanger
2 comprising:

3 a heat-exchange rotor rotatable about an axis and having
4 axially oppositely directed front and rear end faces and an outer
5 periphery;

6 a housing surrounding the rotor and defining a first flow
7 sector for axial front-to-rear flow through the rotor of air from
8 the exterior and, angularly offset from the first sector a second
9 flow sector for axial rear-to-front flow through the rotor of air
10 to the exterior;

11 means for pressurizing the housing around the periphery
12 of the rotor with housing air at a superatmospheric pressure;

13 front and rear separators fixed in the housing,
14 juxtaposed with the respective end faces of the rotor, and
15 extending diametrally of the rotor between the sectors; and
16 means for projecting sealing air from the separators and
17 thereby preventing mixing of air between the sectors.

1 25. (new) A method of operating a regenerative heat
2 exchanger having:

3 a heat-exchange rotor rotatable about an axis and having
4 axially oppositely directed front and rear end faces and an outer
5 periphery;

6 a housing surrounding the rotor and defining a first flow
7 sector and, angularly offset from the first sector a second flow
8 sector; and

9 front and rear separators fixed in the housing,
10 juxtaposed with the respective end faces of the rotor, and
11 extending diametrally of the rotor between the sectors,
12 the method comprising the steps of:

13 flowing air from the exterior axially front-to-rear flow
14 through the first sector of the rotor;

15 flowing air to the exterior axially axial rear-to-front
16 flow through second sector of the rotor of air;

17 pressurizing the housing around the periphery of the
18 rotor with housing air at a superatmospheric pressure;

19 projecting sealing air from the separators and thereby
20 preventing mixing of air between the sectors.